

# Closed Circuit Piston Pump SERIES PMH P



## Description

MH high pressure axial piston pumps for closed loop are specifically designed to be used on heavy duty machines for traction and auxiliary functions, providing efficiency and durability.

## 500 BAR TECHNOLOGY

The global structure of the transmission is designed to handle pressure and loads without deformation: in this way efficiency is also maintained in high pressure working conditions.

## Highlight

500 bar pressure technology, i.e. extremely solid pumps for the toughest applications and conditions.

Wide range of controllers from manual MS, to electric proportional EP, to special controllers like MY, RE specifically designed or special application.

Premium materials, tight tolerances and precision machining

On demand, PHM P feature an additional valve block to include flushing valve, by pass system, dead man valve, cut off valve.

## Product range and technical data

Model			P35	P55	P72	P90	P110	P180
Displacement	V	cm <sup>3</sup>	35,4	55,0	72,1	89,2	110,0	176,1
Maximum speed	n <sub>max</sub>	rpm	4.500	4.300	4.100	4.000	3.800	2.900
Minimum speed	n <sub>min</sub>	rpm	500	500	500	500	500	500
Maximum flow	q <sub>max</sub>	l/min	142	237	295	340	400	511
Nominal pressure	p <sub>nom</sub>	bar	400	400	400	400	400	400
Maximum pressure	p <sub>max</sub>	bar	450	450	450	450	450	450
Maximum power	P <sub>max</sub>	kW	95	130	156	180	210	273
Theoretical max torque	C <sub>max</sub>	Nm	223	350	480	570	700	1.121
Weight	M	Kg	39	42	56	68	68	148

## Available controls

MS, Proportional Manual Control

With the manual proportional control (MS) the displacement of the pump is directly proportional to the angle of the lever. The pump is fitted with a resetting device which automatically reset the lever to central position if no control takes place.

EP, electric proportional control

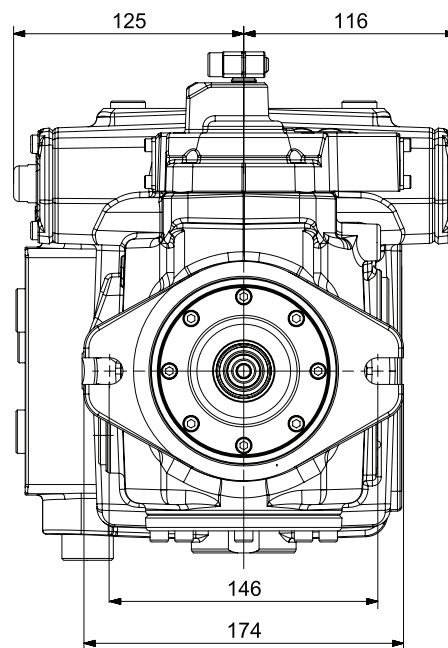
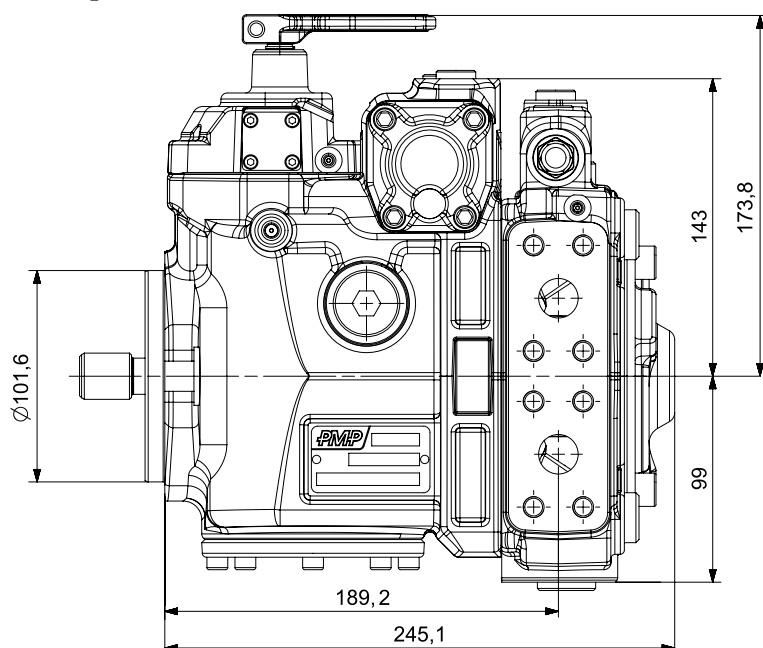
With the electric proportional control (EP) the displacement of the pump is directly proportional to the input current applied to one of the two solenoids. The pump is fitted with a resetting device which automatically reset the control spool to central position if no control takes place.

HP, Hydraulic proportional control (with mechanical feedback)

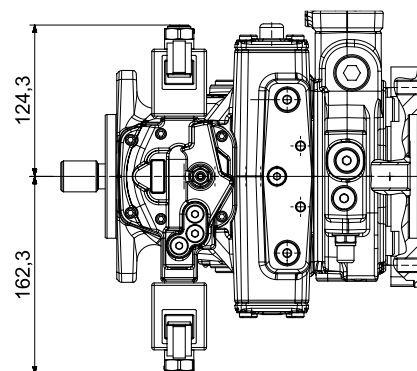
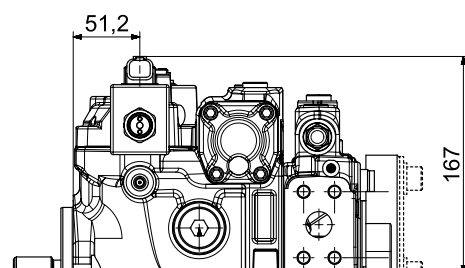
With the hydraulic proportional control (HP) the displacement of the pump is directly proportional to the pilot pressure applied to one of the two control pressure ports. The pump is fitted with a resetting device which automatically reset the control spool to central position if no control takes place.

Size 35

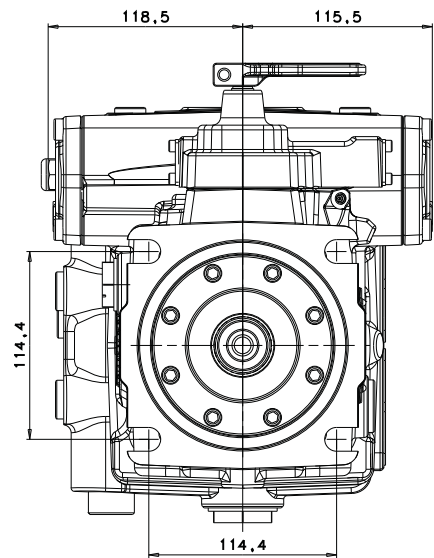
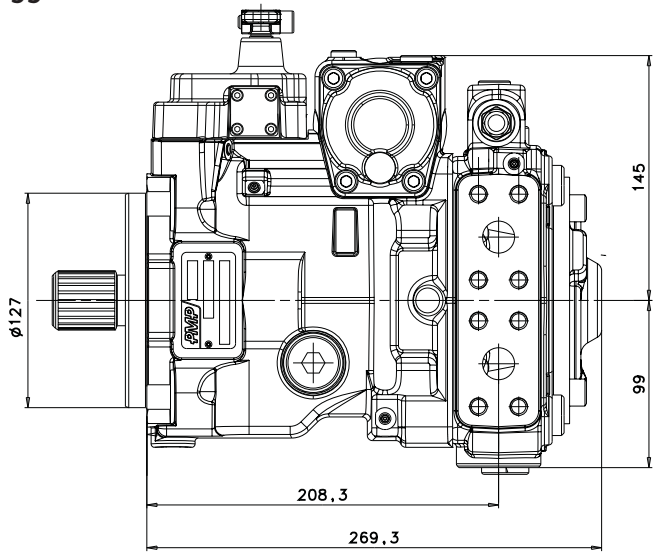
MS, Proportional manual control



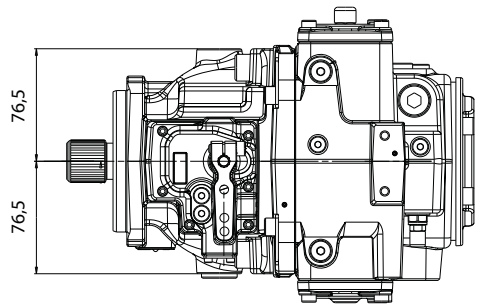
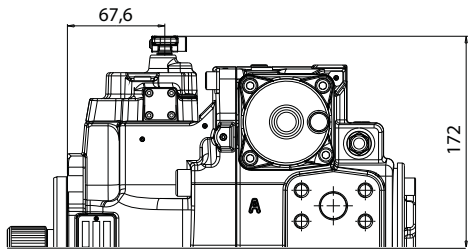
EPI, Proportional electric control



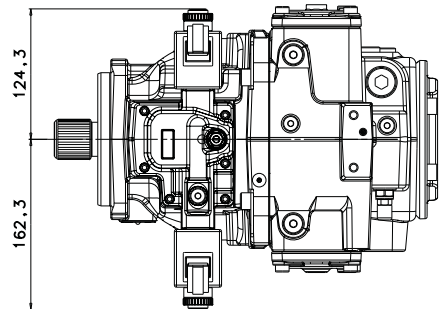
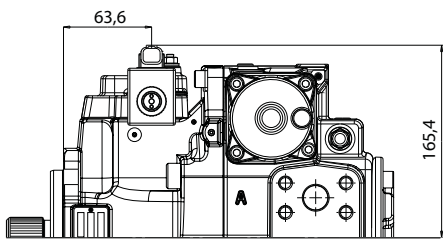
Size 55



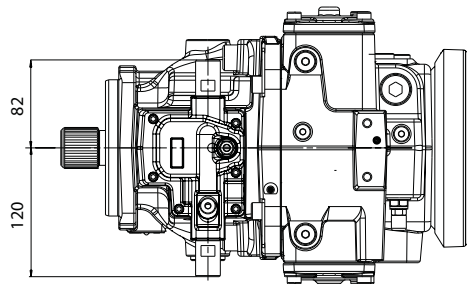
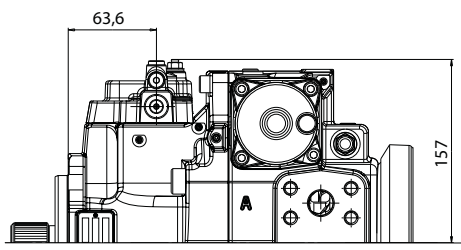
MS, Manual control



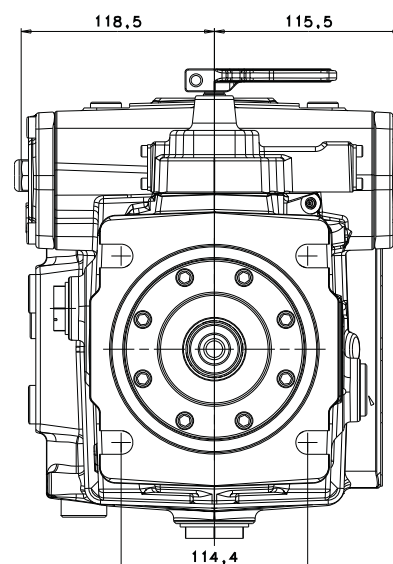
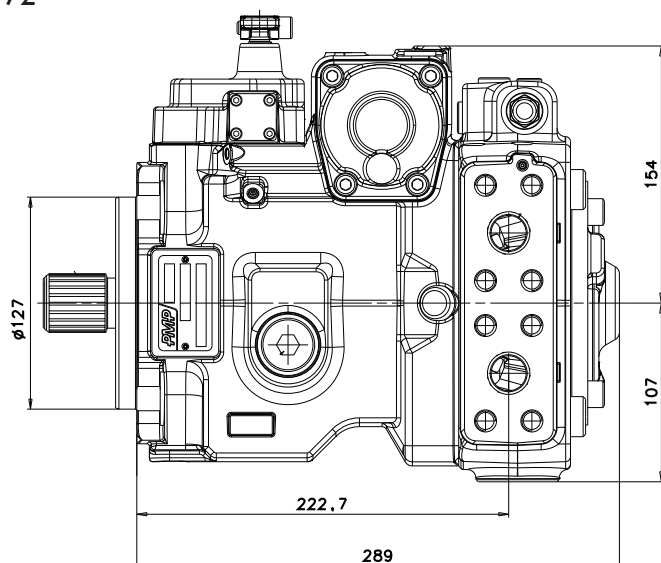
EP, Proportional Electric Control



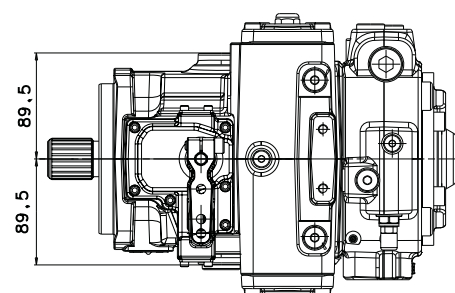
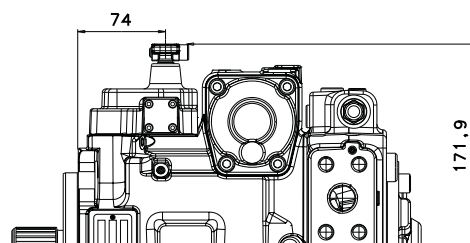
HP, Proportional hydraulic control



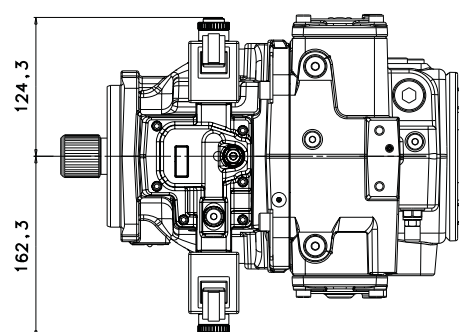
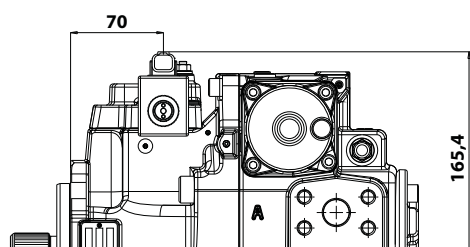
## Size 72



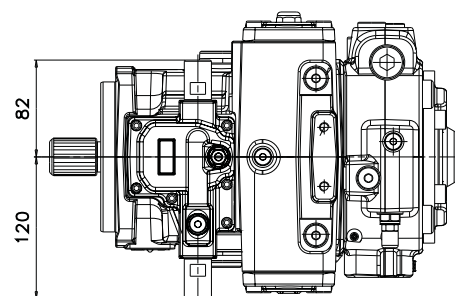
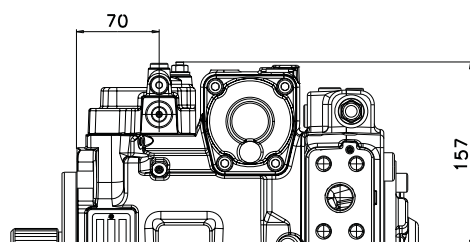
### MS, Manual control



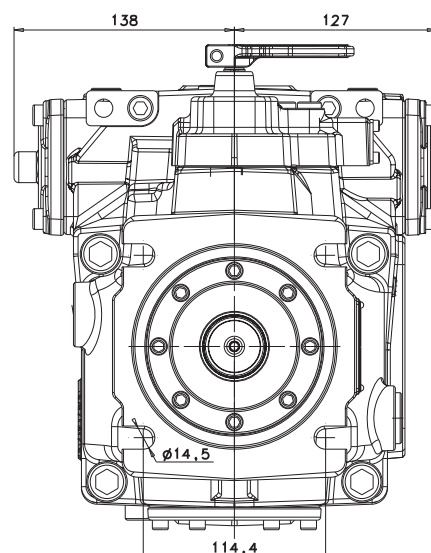
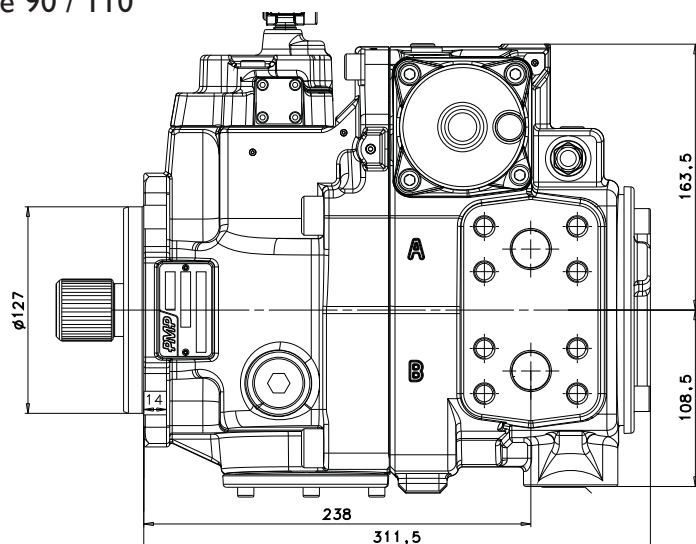
### EP, Proportional Electric Control



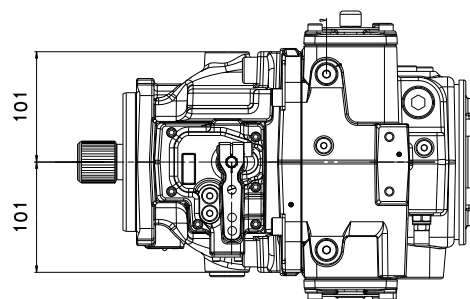
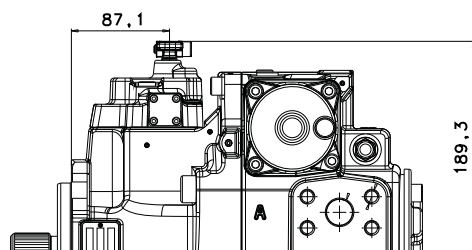
### HP, Proportional hydraulic control



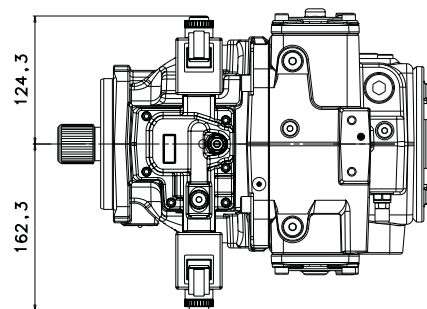
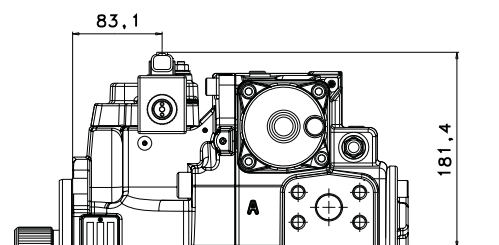
Size 90 / 110



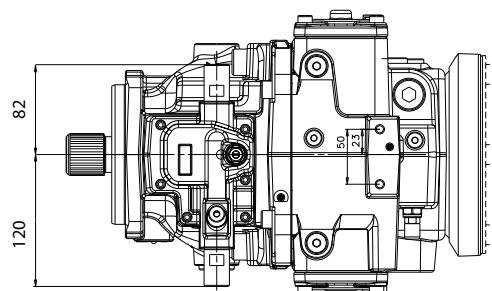
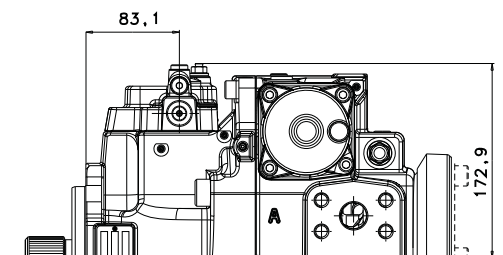
MS, Manual control



EP, Proportional Electric Control



HP, Proportional hydraulic control

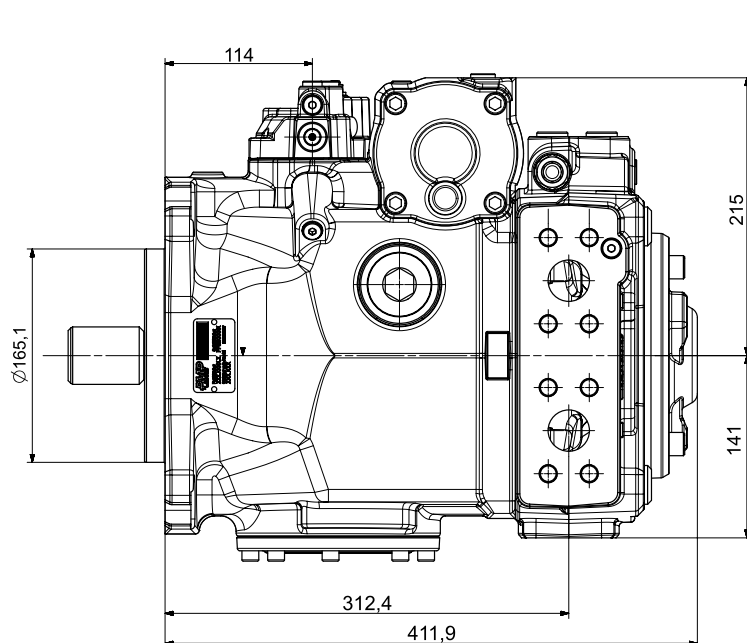


## SAMER services

- Design of systems with pumps and motors in closed and open circuits
- Sale of pumps and motors in closed and open circuits
- Installation and testing of pumps and motors in closed and open circuits
- Repair of pumps and motors in closed circuit and open circuit

## Size 180

HP, Hydraulic proportional control



## Size 210

EP2, Electric Proportional Control

